UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/763,849	04/20/2010	Joseph C. Noviello	07-6256-C1	6199
63710 7590 03/15/2017 INNOVATION DIVISION CANTOR FITZGERALD, L.P. 110 EAST 59TH STREET (6TH FLOOR)			EXAMINER	
			KHATTAR, RAJESH	
NEW YORK, N	NY 10022		ART UNIT	PAPER NUMBER
			3693	
			NOTIFICATION DATE	DELIVERY MODE
			03/15/2017	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocketing@cantor.com lkorovich@cantor.com phowe@cantor.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOSEPH C. NOVIELLO

Appeal 2014-008557 Application 12/763,849¹ Technology Center 3600

Before HUBERT C. LORIN, TARA L. HUTCHINGS, and MATTHEW S. MEYERS, *Administrative Patent Judges*.

LORIN, Administrative Patent Judge.

DECISION ON APPEAL

An oral hearing was held on Feb. 23, 2017.

STATEMENT OF THE CASE

Joseph C. Noviello (Appellant) seeks our review under 35 U.S.C. § 134 of the final rejection of claims 1–24. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION

We REVERSE and enter a NEW GROUND OF REJECTION.

¹ The Appellant identifies BGC Partners, Inc. as the real party in interest. App. Br. 2.

THE INVENTION

Claim 22, reproduced below, is illustrative of the subject matter on appeal.

22. A method, comprising:

generating, by a computer processor, an interface, the interface comprising a trader requirements indicia corresponding to a plurality of trading parameters designated by a trader, each trading parameter comprising a parameter concerning at least one of a purchase and sale of a quantity of at least one financial instrument associated with the trading parameter, each of the plurality of trading parameters being respectively associated with a corresponding one of a corresponding plurality of market data indicia;

receiving, by the computer processor, market data, in which the market data comprises price information about the at least one financial instrument associated with each trading parameter; and

performing, by the computer processor, the following for each of the plurality of trading parameters:

determine a probability of the market data satisfying the respective trading parameter;

determine, based on the probability, a display distance between a display of the trader requirements indicia and a display of the market data indicia corresponding to the respective trading parameter; and

cause to be displayed on the interface the corresponding market data indicia at a location on the interface that is the determined distance away from the trader requirements indicia, in which the determined distance between the market data indicia and the trader requirements indicia indicates the determined probability.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Ram	US 2003/0004853 A1	Jan. 2, 2003
Lockley	US 2005/0044030 A1	Feb. 24, 2005
Sibley	US 2008/0077521 A1	Mar. 27, 2008

The following rejections are before us for review:

- 1. Claims 1–14 and 16–24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ram and Sibley.
- 2. Claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ram and Lockley.

ISSUE

Did the Examiner err in rejecting claims 1–14 and 16–24 under 35 U.S.C. § 103(a) as being unpatentable over Ram and Sibley?

Did the Examiner err in rejecting claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ram and Lockley?

ANALYSIS

The rejection of claims 1-14 and 16-24 under 35 U.S.C. § 103(a) as being unpatentable over Ram and Sibley.

All the claims require determining a display distance between a trader requirements indicia and a market data indicia corresponding to a respective trading parameter based on a probability of the market data satisfying a respective trading parameter. *See* independent claims 1, 9, 22 and 23.

The Examiner relied on Ram. See Final Act. 5 ("Fig. 41,

last traded information indicated by L represents market data, [0281], Fig. 48, [0295], the user's buy order is about 0.20 away from the current bid of GE represents determining a probability; Fig. 49, [0302], allows a user to gauge the relative distance of any security from that security's bid or ask price").

The Appellant disagrees.

We have reviewed the record and find that the evidence weighs in favor of the Appellant's position.

Said Ram disclosures relied-upon by the Examiner are reproduced in the Appeal Brief. App. Br. 9. We agree with the Appellant that "[t]hese passages disclose displaying indicia of buy and sell orders according to their prices." App. Br. 9. Ram supports this position. *See* para. 294 (referring to the view shown in Fig. 48: "The price difference between the bid or ask price and the open limit order is plotted on a common grid and a relative price axis. It results in a cluster of orders around the normalized bid and ask reference points.") The distance between the trader requirements indicia (i.e., bid/ask) and market data indicia (i.e., price) is based on a price difference, not on a *probability* of the market data satisfying a respective trading parameter as claimed.

The Examiner responds, inter alia, that "[t]he distance [shown in Ram] represents the difference in price between the market price and bid or ask price of a security. The shorter the price difference, i.e., shorter the distance between two prices, [the] higher the probability that the order would get executed at the buy/sell prices and vice-versa." Ans. 2. Thus, according to the Examiner, "[a]s these two prices draw closer, the distance

between them would decrease and the probability of executing the order increases." Ans. 2. The difficulty with this reasoning is that there is insufficient evidence to support the premise that there is a direct correlation between market price and bid/ask price such that one of ordinary skill in the art reading Ram would be led to determine a display distance between said indicia based on a *probability* of the market data satisfying a respective trading parameter, as claimed. The Examiner suggests that said direct correlation exists as a matter of common sense and general knowledge. We disagree, finding said correlation lacks adequate evidentiary support, especially given the Appellant's reasonable explanation showing said correlation does not necessarily exist. *See, e.g.*, Reply Br. 3: "it is entirely possible that one order .2 away has a 50% chance of execution, another order .3 away has a 40% chance of execution, and a third order .4 away has a 3% chance of execution. If so, FIG. 48 would be an entirely inaccurate and misleading representation of probability."

The Examiner also cites Sibley. According to the Examiner, Sibley discloses "determin[ing] a probability of the market data satisfying the respective trading parameter." Final Act. 5. We agree that Sibley discloses probability. *See, e.g.*, para. 10: "calculating the probability of success for executing a trade." But we do not see how this disclosure would lead one to modify Ram so as to determine a display distance between said indicia based on a probability of the market data satisfying a respective trading parameter, as claimed. The ability to determine a probability of a market data satisfying a respective trading parameter is alone insufficient to lead one to modify Ram's system so that the display of the price distance is instead a display of

the distance between a trader requirements indicia and a market data indicia corresponding to a respective trading parameter based on a probability of the market data satisfying a respective trading parameter, as claimed.

A prima facie case of obviousness has not been made out in the first instance by a preponderance of the evidence. Accordingly, the rejection is not sustained.

The rejection of claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ram and Lockley.

Claim 15 depends from claim 1. Its rejection is not sustained for the same reasons discussed above.

NEW GROUND OF REJECTION

Claims 1–24 are rejected under 35 U.S.C. § 101 as being directed to judicially-excepted subject matter.

Alice Corp. Pty. Ltd. v. CLS Bank International, 134 S. Ct. 2347 (2014) identifies a two-step framework for determining whether claimed subject matter is judicially-excepted from patent eligibility under § 101.

According to *Alice* step one, "[w]e must first determine whether the claims at issue are directed to a patent-ineligible concept," such as an abstract idea. *Alice*, 134 S. Ct. at 2355.

Taking claim 22 as representative of the claims on appeal, the claimed subject matter is directed to graphical representation. Graphical representation is a fundamental building block of human ingenuity. As such it is an abstract idea.

Step two is "a search for an 'inventive concept'—i.e., an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Id.* (alteration in original) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294 (2012)).

We see nothing in the subject matter claimed that transforms the abstract idea of information gathering into an inventive concept.

The method of claim 22 sets out three steps for: (1) generating, (2) receiving, and (3) performing determinations and causing the determinations to be displayed that are known operations for creating a desired arrangement of information and subsequently displaying it, and thus add little to patentably transform the graphical representation abstract idea.

Furthermore, each of the generating, receiving, and performing determinations steps and causing a display are themselves abstract ideas. Merely combining three abstract ideas does not render the combination any less abstract. *Cf. Shortridge v. Found. Constr. Payroll Serv., LLC*, No. 14-CV-04850-JCS, 2015 WL 1739256 (N.D. Cal. Apr. 14, 2015), *aff'd*, No. 2015-1898, 2016 WL 3742816 (Fed. Cir. July 13, 2016).

Regarding in particular the performing of a determination of "a probability of the market data satisfying the respective trading parameter" (claim 22), this does little more than to calculate and gather data. *Cf. Capital Dynamics v. Cambridge Associates, LLC*, No. 2016-1318, 2016 WL 4709879 (Fed. Cir. Sept. 9, 2016) (involving US 7,698,196, e.g., claim 17 ("analyzing ... to determine ... a probability")). The resulting "probability"

information yields data for input into a desired arrangement for subsequent display.

Regarding in particular the performing of a determination, based on the probability, a display distance between a display of one indicia and another, and causing the two indicia to be displayed at said display distance indicative of said probability, they do little more than to put said indicia in a desired arrangement for display based on certain calculated and gathered data. *Cf. RaceTech, LLC v. Kentucky Downs, LLC*, 167 F.Supp.3d 853 (W.D.Ky., 2016), *affd.*, No. 2016-1672, 2017 WL 563154 (Fed. Cir., Feb. 13, 2017) (game terminals); *Gametek LLC v. Zynga, Inc.*, 2014 WL 1665090, (N.D.Cal., 2014), *aff'd*, 597 Fed.Apx. 644 (2015) (game environment display); and, *Planet Bingo, LLC v. VKGS LLC*, 576 Fed.Appx. 1005 (Fed. Cir. 2014) (displaying Bingo numbers).

None of these individual steps, viewed "both individually and 'as an ordered combination," transform the nature of the claim into patent-eligible subject matter. *See Alice*, 134 S.Ct. at 2355 (*quoting Mayo*, 132 S.Ct. at 1297, 1298).

Finally, we note that claim 22 calls for the recited method to employ a "computer processor" to (a) generate an interface; (b) receive data and (c) perform certain probability determinations and display data in an arrangement consistent therewith. But any general-purpose computer available at the time the application was filed would have been satisfactory for conducting these operations, which operations are commonly associated with the use of a generic computer. The Specification supports that view. *See* Spec., e.g., para. 23 ("Examples of input devices include a game

controller device 36, a keyboard, a mouse, a microphone, and/or another end-user element." And "[e]xamples of display devices 32 include a computer display, a CRT monitor, or a television.") *Cf. Alice*, 134 S. Ct. at 2358 ("[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention. Stating an abstract idea "while adding the words 'apply it" is not enough for patent eligibility.").

For the foregoing reasons, we find that claim 22 covers claimed subject matter that is judicially-excepted from patent eligibility under § 101. The other independent claims — system claims 1 and 9 and medium claim 23 parallel claim 22 — similarly cover claimed subject matter that is judicially-excepted from patent eligibility under § 101. The dependent claims describe various data gathering and correlating schemes which do little to patentably transform the abstract idea.

Therefore, we enter a new ground of rejection of claims 1–24 under 35 U.S.C. § 101.

For the foregoing reasons, the prior art rejections are reversed but the claims are newly rejected under § 101.

CONCLUSIONS

The rejection of claims 1–14 and 16–24 under 35 U.S.C. § 103(a) as being unpatentable over Ram and Sibley is reversed.

The rejection of claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ram and Lockley is reversed.

Application 12/763,849

Claims 1–24 are newly rejected under 35 U.S.C. § 101 as being directed to judicially-excepted subject matter.

DECISION

The decision of the Examiner to reject claims 1–24 is reversed. Claims 1–24 are newly rejected.

NEW GROUND

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). 37 C.F.R. § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review." 37 C.F.R. § 41.50(b) also provides that the Appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

- (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .
 - (2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2011).

REVERSED; 37 C.F.R. § 41.50(b)